

IN THE CLAIMS

1. – 53 (Canceled)

54. (Currently Amended) A machine implemented method performed by a network element having a first interface communicatively coupled to a ~~subscriber over a network provider~~ first network and a second interface communicatively coupled to a ~~service provider over a service provider~~ second network, the method comprising:

receiving a request from a user via a command line interface (CLI) of the network element for configuring the network element, the request accessing a configuration file stored in a database that is used to route network traffic between the ~~network provider~~ first network and the ~~service provider~~ second network via the first and second interfaces, the ~~network provider~~ first network being different than the ~~service provider~~ second network;

in response to the request, recording operations of the request in a transaction log separated from the database without accessing the database until a commit command is received from the user via the CLI of the network; and

performing the recorded operations of the request from the transaction log to access a record of the database associated with the request received from the user in response to a commit command from the CLI indicating that the user has committed to the requested configuration.

55. (Previously Presented) The method of claim 54, wherein the transaction log comprises a persistent memory in which content of the transaction log is maintained after the network element is powered down or rebooted.

56. (Previously Presented) The method of claim 54, further comprising prior to recording the operations of the request in the transaction log, acquiring a lock for locking the record of the database associated with the request to prevent other users from accessing the record of the database.

57. (Previously Presented) The method of claim 56, further comprising:
receiving further modification of configuration from the user prior to the commit
command; and
storing the modification in the transaction log without accessing the data base until the
commit command is received from the user upon which the modification of the
configuration is committed from the transaction log to the locked record of
database.

58. (Previously Presented) The method of claim 56, further comprising:
receiving an abort command from the user via the CLI prior to receiving the commit
command; and
in response to the abort command, removing the operations of the request from the
transaction log and releasing the acquired lock without accessing the database.

59. (Previously Presented) The method of claim 58, wherein after performing the removing and releasing in response to the abort command, the record of the database remains substantially identical with respect to the record prior to receiving the request.

60. (Currently Amended) The method of claim 56, further comprising indicating within the transaction log that the request is in a committing state while the transaction is active.

BEST AVAILABLE COPY

BEST AVAILABLE COPY